

**AMENDMENTS TO THE CLAIMS**

Please amend the claims as follows:

Please cancel claim 12.

1-10. Canceled.

11. (Currently Amended) A method of producing a I-III-VI<sub>y</sub> compound in thin film form, in which y is close to 2, by electrochemistry, comprising:

a) providing an electrolysis bath comprising an element I compound, at least one element VI compound and at least one element III compound dissolved in the electrolysis bath and at least two electrodes immersed in the electrolysis bath; and,

b) applying a potential difference between the two electrodes to initiate formation of a thin film of I-III-VI<sub>y</sub> on the surface of one of the electrodes,

wherein the electrolysis bath further comprises at least one surfactant to promote incorporation of the element III compound into the film, and wherein the element I compound comprises copper, gold or silver, the at least one element III compound comprises boron, aluminum, gallium, indium or thallium and the at least one element VI compound comprises oxygen, sulfur, selenium, tellurium or polonium.

12. (Canceled)

13. (Previously Presented) The method of Claim 11, wherein the surfactant has a chemical formula CH<sub>3</sub>(CH<sub>2</sub>)<sub>n</sub>O-SO<sub>3</sub>-X, where n is greater than or equal to 5 and X is an atomic species selected from the group consisting of H, Na, Li and K.

14. (Previously Presented) The method of Claim 13, wherein the surfactant comprises sodium dodecylsulfate.

15. (Previously Presented) The method of Claim 11, wherein the surfactant comprises 2-butyne-1,4-diol.

16. (Previously Presented) The method of Claim 11, wherein the surfactant comprises maleic acid.

17. (Previously Presented) The method of Claim 11, wherein the surfactant comprises succinic acid.

18. (Previously Presented) The method of Claim 11, wherein the surfactant comprises fumaric acid.

19. (Previously Presented) The method of Claim 11, wherein the surfactant comprises crotonic acid.

20. (Currently Amended) The method of Claim ~~12~~ 11, wherein the surfactant in the electrolysis bath is in a concentration substantially of the same order of magnitude as a concentration of gallium or a concentration of aluminum in the electrolysis bath.